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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/045,565 | 10/19/2001 | Mehran Bashiri | 1001.1504101 | 1828 |
| 28075 | 7590 | 03/30/2005 | EXAMINER | |
| CROMPTON, SEAGER & TUFTE, LLC 1221 NICOLLET AVENUE SUITE 800 MINNEAPOLIS, MN 55403-2420 | | | WOO, JULIAN W | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3731 | |

DATE MAILED: 03/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

87

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|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/045,565 | Applicant(s) BASHIRI ET AL. | |
| | Examiner Julian W. Woo | Art Unit 3731 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-12,14-19 and 21-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,6-11,17-19,21-26,28 and 29 is/are rejected.
- 7) ☒ Claim(s) 2,3,12,14-16 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4, 6-9, 17-24, 28, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Phan et al. (5,192,286). Phan et al. disclose, in figures 1-3C, an embolus extractor and a method of withdrawing the embolus extractor, where the extractor has a microcatheter (10), an elongate shaft (18 with respect to claim 1 or 28 with respect to claim 18) and first and second struts (fibers or threads of net, 26), where each strut has a proximal end and a distal end, where—with respect to claim 1—the distal end of each strut is coupled to the distal end of the shaft (18); where—with respect to claim 18—a strut has a proximal end and a distal end coupled to shaft (28), where the struts have first and second positions, where, in the second position, the proximal and distal ends of the struts are spaced at a second distance less than a first distance between the ends at the first position (see figs. 3A-3C); wherein the second position, the proximal ends of the struts form an open, generally circular mouth eccentric with respect to the shaft (see figs. 2 and 2A); wherein the first position, the struts are disposed generally parallel and adjacent to the shaft (see fig. 3A); where the struts extend generally distally from the mouth to define a generally tapering body (see fig. 3C), where the proximal portion of the struts forming the mouth extend from the shaft at an angle between 45 deg. to 90

Art Unit: 3731

deg., and where the struts include a radiopaque material or marker (metallic threads according to col. 4, line 27).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 10, 11, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phan et al. in view of Oslund et al. (6,740,061). Phan et al. disclose the invention substantially as claimed, but do not disclose that the metallic struts include a shape memory metal or a NiTi alloy. Oslund et al. teach, in col. 3, lines 40 and 41, a embolus extractor including a NiTi alloy (nitinol, a shape memory metal). It would have been obvious to one having ordinary skill in the art at the time the invention was made, in view of Oslund et al., to include a shape memory metal or a NiTi alloy in the struts of the device of Phan et al. Such a metal would render the struts strong, flexible, biocompatible.

Art Unit: 3731

5. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Phan et al. in view of Ladd (6,059,814). Phan et al. disclose the method substantially as claimed, but do not disclose a radiopaque marker at the distal end of the microcatheter. Ladd teaches, in col. 7, lines 3-8, an embolus extractor with a radiopaque marker (64) at the distal end of a catheter. It would have been obvious to one having ordinary skill in the art at the time the invention was made, to include a radiopaque marker on the microcatheter of Phan et al. Such a marker would allow location of the microcatheter within a patient's body and would allow location and positioning of any radiopaque devices moved relative to the microcatheter.

Allowable Subject Matter

6. Claims 2, 3, 12, 14-16, and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art of record, alone or in combination, discloses an embolus extractor and a method of withdrawing the embolus extractor, where the extractor has, inter alia, a microcatheter, an elongate shaft and first and second struts, where each strut has a proximal end and a distal end, where the distal end of each strut is coupled to the distal end of the shaft; where the struts have first and second positions, where, in the second position, the proximal and distal ends of the struts are spaced at a second distance less than a first distance between the ends at the first position, and wherein the second position, the proximal ends of the struts form an open, generally circular mouth

Art Unit: 3731

eccentric with respect to the shaft, where sleeves are slidably coupled to the ends of the struts, where a third strut with a transverse cross-sectional area less than the transverse cross-sectional area of each of the first and second struts is include in the extractor; where the first and second struts are movable independently of each other, are rotatable about the shaft, and are translatable along the shaft; and where the first strut has a transverse cross-sectional area greater than the transverse cross-sectional area of the second strut.

Response to Amendment

8. Applicant's arguments filed on January 18, 2005 have been fully considered but they are not persuasive. With respect to arguments regarding the rejection of claims based on the reference of Phan et al.: See the rejection above. Also, the Examiner agrees with the Applicant's assertion that "a net is clearly not a strut." However, the net of Phan et al. comprises struts. That is, according the col. 4, lines 14-37, the net of Phan et al. comprises fibers or threads (e.g., natural or polymeric fibers or metallic threads), which can be considered to be, in the art, discrete elongated members or struts woven or formed into the net.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

Art Unit: 3731

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3731

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian W. Woo whose telephone number is (571) 272-4707. The examiner can normally be reached Mon.-Fri., 7:00 AM to 3:00 PM Eastern Time, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anh Tuan Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Julian W. Woo
Primary Examiner

March 24, 2005